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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/456,270	12/07/1999	BRUCE J. KOKKO	2130(FJ-99-1	6225

7590 09/10/2002  
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EXAMINER

ALVO, MARC S

ART UNIT PAPER NUMBER

1731

DATE MAILED: 09/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/456,270

Applicant(s)

KOKKO, BRUCE J. 

Examiner

Steve Alvo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-10, 13-15, 18-20, 31-35 and 56-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 13-15, 18-20, 31-35 and 56-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20, 31-35, 56 and 57 are rejected under 35 U.S.C. 103(a) as obvious over ADMITTED PRIOR ART (Formulation A or B of the IDS filed 10-15-2001) in view of BACK et al '681.

The ADMITTED PRIOR ART (Formulation A or B) teaches using the same formulation used by Applicant to treat paper pulp with a debonding composition (Formulation A or B) to make an absorbent sheet. BACK et al teaches that absorbent sheets can be made from recycle paper, e.g. newspapers. It would have been obvious to the artisan to use the recycled wood pulp of BACK et al as the wood pulp of the ADMITTED PRIOR ART. This would have been especially obvious as the debonding composition (Formulation B) is promoted by its manufacturer as being "Best on virgin and mixed virgin/recycled", see IDS page 2, last paragraph. Clearly Formulation B can be used on recycled pulp.

Claims 1-10, 12-20, 31-35, 56 and 57 are rejected under 35 U.S.C. 103(a) as obvious over OSBORN, III '699 with or without BACK et al '681.

OSBORN, III teaches making an absorbent sheet from a web of fibrous material using a combination of a quaternary ammonium surfactant component and a non-ionic surfactant as debonding agent (column 5, lines 18-24) to produce a sheet having reduced (column 5, line 22)

tensile strength. It is well known to recycle newspaper to papermaking processes to provide an economic and environmentally friendly source of wood pulp material. If necessary, BACK et al teaches that absorbent sheets can be made from recycle paper, e.g. newspapers. OSBORN, III teaches that any variety of wood pulp can be used as the fibrous material. It would have been obvious to the artisan to use the recycled wood pulp of BACK et al as the wood pulp of OSBORN, III. It would be obvious to the artisan to adjust the amount of debonding materials needed to provide the proper amount of debonding. See OSBORN, III for using alkoxyated and ethoxyated fatty acids and alcohols, including PEG-9 oleate and PEG-4 dilaurate. The specific alkoxyated and ethoxyated fatty acids and alcohols appear to be commercially available. It would have been prima facie obvious to substitute one alkoxyated or ethoxyated fatty acid or alcohol surfactant for another.

Claims 11 and 31-35, 56 and 57 are rejected under 35 U.S.C. 103(a) as obvious over OSBORN, III '699 with or without BACK et al '681, for the reasons set forth above in the rejection of claim 1, and further in view of WENDT et al '839. The exact imidazolinium quaternary compound appears to be commercially available. It would have been prima facie obvious to substitute one imidazolinium quaternary surfactant for another.

WENDT et al '839 teaches a process very similar to OSBORN, III to produce a softened absorbent paper using a quaternary compound and a non-ionic surfactant. WENDT et al '839 teaches that using imidazolinium quaternary compounds as the debonding compound has the additional advantage of not adhering to the drying surface, which is a problem with other debonder/softening

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agents. It would have been obvious to one of ordinary skill in the art to substitute the imidazolinium quaternary compounds of WENDT et al '839 for the quaternary compound of OSBORN' III to prevent the debonding agent from adhering to the drying surface.

Applicant has argued that the prior art does not show the synergy shown in Table 1 of the instant Application. However, it is not clear what synergy Table 1 shows. Applicant argues that the instant formulation (Formulation B) exhibits a 20% (tensile reduction) and 32% (tensile reduction) compared to the 4% and 8% when PEG-6 dilaurate was used alone. It appears Applicant is arguing that the second to last column uses PEG-6 dilaurate alone. It is not clear where this is disclosed in the specification. It is not seen how "tensile reduction" is an improvement as tensile strength is normally a desired characteristic of the pulp. Besides this is not a comparison to the closest Prior Art, e.g. OSBORN, III '699 teaches using a combination of a quaternary ammonium surfactants and nonionic surfactant (column 5, lines 18-24), including PEG dilaurates (column 4, lines 52-60). In column 8, lines 20, OSBORN, III; '699 teaches that using quaternary ammonium compounds and nonionic surfactants produced paper towels significantly more absorbent and significantly softer than the control paper towels. Such any improved results resulting from the

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combination of a quaternary ammonium surfactant and nonionic surfactant would be expected from the teachings of OSBORN, III; '699. In addition Applicant has argued the improved results of Formulation B. This formulation used a very specific composition, e.g. a 1:9 ratio of "di-(2-hydroxyethyl methyloctadecylammonium chloride" and "dimethyl-ditallowammonium chloride, formulated with 33% PEG-6-dilaurate". Also Formulation B was used on "100% recycle pulp" in the Table. None of the claims are drawn this formulation, e.g. 1:9 ratio of di-(2-hydroxyethyl methyloctadecylammonium chloride and dimethyl-ditalallowammonium chloride, formulated with 33% PEG-6-dilaurate and only claim 57 is limited to 100 recycle material.

Table 3 presented by Applicant does not indicate what specific PEG's were used. TABLE 8 uses a single data point for R=18. This is not enough data to determine unexpected results. Besides, as set forth above OSBORN, III '699 teaches using PEG dilaurates (column 4, lines 52-60).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

When filing an "Official" FAX in Group 1730, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file. The "Official" FAX phone numbers for this TC 1700 are:

Non-Final Fax: (703) 872-9310 After-Final FAX: (703) 872-9311

When filing an "Unofficial" FAX in Group 1730, please indicate in the Header (upper right) "Unofficial" for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers. The "Unofficial" FAX phone number for this Art Unit (1731) is (703) 305-7115.

Any inquiry concerning this communication or earlier communications from the primary examiner should be directed to Steve Alvo whose telephone number is (703) 308-2048. The Examiner can normally be reached on Monday - Friday from 6:00 AM - 2:30 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stanley Silverman, can be reached on 703-308-3837.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is (703) 308-0661.

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MSA  
January 30, 2002



**STEVE ALVO**  
**PRIMARY EXAMINER**  
**ART UNIT 1731**